

INTERNATIONAL SEARCH REPORT

International Application No

T/IL2004/000606

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 B23K20/06 B21D51/26

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B23K B21D F25B F17C F16J

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 3 528 596 A (M.J. CARLSON) 15 September 1970 (1970-09-15)	1,9, 11-13, 18,20, 21,24
A	column 1, lines 27-29,56-66 column 2, line 37 - column 3, line 38; figures 2,3	3,10,17, 19
X	US 2002/116817 A1 (J.B. HARDESTY ET AL) 29 August 2002 (2002-08-29)	1,2, 9-11,13, 16,18, 19,21,24
Y	paragraphs '0022!, '0028! - '0033!; figures 1,4 ----- -/--	3,4,14

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *Z* document member of the same patent family

Date of the actual completion of the international search

21 October 2004

Date of mailing of the international search report

27/10/2004

Name and mailing address of the ISA

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 6 539 745 B1 (C.G. HARMER ET AL) 1 April 2003 (2003-04-01)	3, 4, 14
A	abstract; figures 4a-d -----	5-8, 17
X	US 6 137 094 A (L. KISTERSKY ET AL) 24 October 2000 (2000-10-24)	21-24
A	column 4, lines 23-62; figure 3 -----	1
X	US 6 548 791 B2 (L. KISTERSKY ET AL) 15 April 2003 (2003-04-15)	21-24
A	column 8, line 44 - column 9, line 10; figures 6-9; example -----	1
X	US 6 389 697 B1 (R.L. BENOIT ET AL) 21 May 2002 (2002-05-21)	21, 24
Y	column 1, line 64 - column 2, line 44 column 4, line 41 - column 5, line 7; figures 2-6 -----	1, 4-6, 9, 11, 13, 15-18, 20
X	US 5 191 775 A (K. SHIINA ET AL) 9 March 1993 (1993-03-09)	21, 24
Y	cited in the application the whole document -----	1, 4-6, 9, 11, 13, 15-18, 20

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box II.2

Claims Nos.: 25

Claim 25 is not written in respect with Rule 6 (2) (a) PCT, as claim 25 makes reference to images representing the joint under an optic microscope. It is not clear (Article 6 PCT) which features are defined in this claim. Therefore, it is not possible to establish a opinion concerning novelty and/or inventive step as it is impossible to clearly distinguish features of the joint from these images.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.5), should the problems which led to the Article 17(2) declaration be overcome.

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Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☒ Claims Nos.: 25
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
see FURTHER INFORMATION sheet PCT/ISA/210
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

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Information on patent family members

International Application No

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Patent document cited in search report		Publication date	Patent family member(s)		Publication date
US 3528596	A	15-09-1970	US	3417456 A	24-12-1968
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US 6539745	B1	01-04-2003	US	6453697 B1	24-09-2002
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			WO	0018526 A2	06-04-2000
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			US	2002108946 A1	15-08-2002
			US	2001019468 A1	06-09-2001
US 6389697	B1	21-05-2002	NONE		
US 5191775	A	09-03-1993	JP	2064855 U	16-05-1990
			DE	3936251 A1	03-05-1990